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Does Europe need a Food policy?

A Food system approach to Public policy for Food in the European Union

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Paper prepared for presentation at the 148th seminar of the EAAE,

“ Does Europe need a Food Policy? ” , Brussels, Belgium

30 November – 1 December, 2015

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“The greatest deficit in the food economy is the democratic one. By harnessing people’s knowledge and building their needs and preferences into the design of ambitious food policies at every level, we would arrive at food systems that are built to endure,”

Olivier de Schutter, Special Rapporteur on the right to food (2008-2014), Human Rights Council, United Nations

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Introduction

The European Union addresses the wide scope of activities linked to food production and consumption with a plethora of policy interventions, legal rules and regulation, extensive subsidies and incentives.

From the policy perspective, it is a rather academic question if all of these together qualify as a policy in itself or not. On the contrary, the operational question is whether the European Union approach to food achieves its objectives. Given the fact that the scope of food is so wide, that so many actors, elements, resources and interests are involved, contradictions and inconsistencies, gaps and overlaps seem to be the rule not the exception.

Therefore, this paper aims at identify which are the objectives of an EU Food policy. The approach used is to identify the food system that is the underlying logic of EU Food policy; how this Food systems reflects the underlying political system and societal values of the EU; what in turn are the basic elements, principles and institutions of EU Food policy and its respective tasks and tools; and on this basis, the identification of inconsistencies and gaps as well as the way forward.

Chapter One aims at identifying the key elements of Food systems and provides a rough classification of global food systems currently existing;

Chapter Two applies the classification criteria of Food systems to the European Union, setting up an indicative list of indicators to assess the currently legal and institutional and policy framework;

Chapter Three identifies the contradictions and inconsistencies between EU underlying values and norms and the actual Food system supported and maintained by EU policy while showing the way forward for a more comprehensive and consistent approach;

In conclusion, this policy paper aims to demonstrate a few key principles to be considered in future developments of the various elements of the EU Food policy based on an analysis of the current Food systems existing in Europe. This will allow for a more comprehensive approach to bring the policy intervention and regulatory action in line with the underlying values and norms of the European Union by creating synergies and ensuring consistency.

I Key elements of the current global Food systems

The modern '*world of food*' is not shaped by isolated, random facts and events but the result of a 'complex and ever-changing web of industrial, technological, economic, social and political factors' that all together define the actual product, our daily food, and the process of delivery. From a technological perspective this can be referred to as the '*Global Food Supply Chain*'.

A more political perspective defines Food systems as a reflection of the economic and social system of a society and its values. Such a Food system encompasses all activities related to the production, processing, distribution, retailing and consumption of food, as expressed in the Commission health and food safety department motto of '*farm to fork*'.

In addition, the notion of food systems also includes the outcomes of food-related activities, such as food access (access rights or/and financial means), adequacy (environmental impact in production and use, nutritional quality) and acceptability (socio-cultural and traditions, consumer information and mass media).

In the real world, several (theoretical) food systems exist in parallel all over the world, although they can be traced to a specific region as source and main occurrence, but exist almost at any place at the same time, with different regions and countries dominated by a certain system.

I.1 Definition of food systems

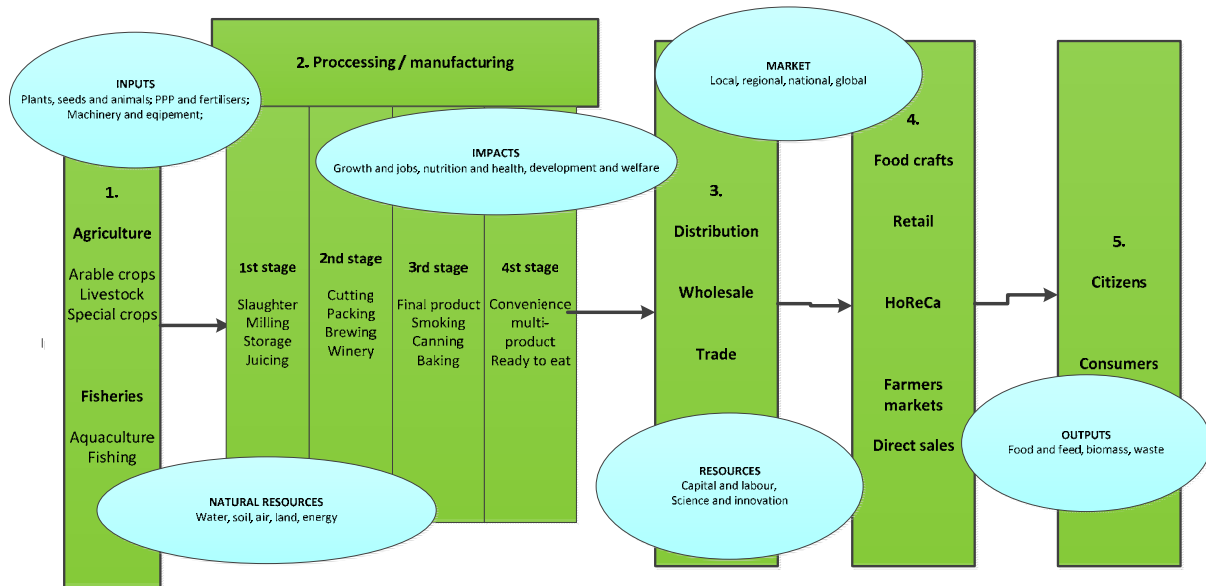
The original definition of food as first of all a product of primary (agriculture) production and everything else as respective up-and downstream sectors (seeds and animals, processing and distribution) prevailed for many years. Moving on from this definition, the model of a supply chain has been promoted in recent years to reflect the flow of goods (and services) from source (production) to final use primary (consumption).

In recent years, acknowledgement of the complexity of impacts and dependencies has led to definition of Food systems, which can be described as comprising five sets of activities:

1. Producing food: Primary production including up-stream sectors such as animal and plant breeding, fertilisers and PPP, specialised equipment and agriculture machinery;
2. Processing food from 1st (e.g. slaughter) to 4th (e.g. convenience food) stage;
3. Packaging and distributing food including whole sale and (external) trade;
4. Retailing (specialised food stores and combined stores, including discount)
5. Consumption (private households and catering, hotels, restaurants and mobile).

The combined result of the various activities within a food system lead to a number of outcomes and impacts, which contribute to food security, nutrition and health and social welfare and consumer choice, but also include impacts on the environment, climate change and international development.

Table 1: Schematic model of the Food chain



Source: EC DG SANCO 2013 revised

Food systems can be defined as a comprehensive and structured combination of various actors working together to deliver food and linked products to their respective entity, bringing together the following components:

- **Multi-Level:** Local, regional, EU Member states/EU Single market or global;
- **Multi-Stakeholder:** Family-farms to rural communities, seeds and feed producers, animal breeders, to all levels of processors (first to fourth), distributors and logistics providers including international traders, retailers, HoReCa and the final consumer;
- **Multi-Functional:** From agriculture production and its inputs comprising all levels of processing, distribution, retail and the final consumption as well as linked non-food products and services;
- **Multi-Impact:** Macro- and micro economic impact, social in terms of employment, training and education, and research and innovation; consumers welfare and choice; environmental in terms of resource efficiency, climate change and impact on soil, water, air and biodiversity, health in terms of users and providers, animal and plant health, diseases prevention and healthy nutrition, as well as international trade and development;

This descriptive approach can be translated into a more analytical by defining a set of indicators for each of the components listed above:

Table 2: Overview of Global Food systems - matrix

Level			
Global	Member states / TC	Supra-national	Region & local
Main focus on global level with globalised supply chain for optimal resource	Main focus on national level , policy designing and managing according to	Main focus on supranational level (common market)	Main focus on local community of major economic activity including

allocation and international marketing	national criteria and	organisational) and regional (rural development programmes)	up and downstream to farming
Stakeholder			
Processors, traders, retailers	Public authorities	Farming community	Consumers
Key role for economic actors such as (multinational) processors and highly concentrated retailers in an integrated supply chain	Public authorities as the key player to define and implement policies, from production to consumption with both price and quantity intervention	Family farms, SME and informed consumers in an open market with competition and transparency	Local community driven, close contacts between producers and consumer, subsistence farming, direct marketing
Function			
Food as commodity	Policy	Services	Subsistence
Focus on marketing global brands of globally sourced food stuffs, high degree of processing	Not a buyers but a seller market with limited choice of the actors and decision power as well as management with public authorities	Multifunctional agriculture , delivering not only food and feed but also service and goods (biomass)	Primary products focused production with biomass for traditional use
Impact			
Economics	Social policy	Health and nutrition	Environmental
Cost efficiency a priority with high productivity (low units costs), economics of scale and product innovation	Delivering on public policy objectives established by public authorities	Fostering SME and family farms providing non-monetary benefits and integrated development on regional level including process innovation (agroecology)	Traditional and low innovation, low input-output systems with restricted consumer choice

Source: Own compilation

1.2 Classification of food systems

These criteria, when applied to the respective Food system allow for a comparative review while identifying the comparative advantage.

Currently, roughly four basic food systems can be identified on global level: the community-based, the industrialised, the political-driven as well as the family-farming and SME-driven Food system However, due to globalisation of trade and commerce, the industrialised system is currently the one of overarching importance. In more detail:

- **Industrialised food system**, built on multi-national enterprises and inter-continental supply chains, highly integrated from production to the final consumers, driven by upstream actors (seeds and chemical companies), large processors (food producers from primary to fourth processing level) and powerful retailers (market concentration); this system is mostly associated with the USA but at this time exists in parallel on a global level with strong presence in Europe and Asia as well as Latin America and Oceania;
- **Political food system**, a system based on ideology instead of an working market economy, putting political dogma over natural and citizens interest, with limited individual ownership rights and highly inefficient resource-allocation due to the lack of market prices; previously widely used (ex-Soviet Union and satellites) but now reduced to PR Chain and North Korea;

- **Family farming**, based on the multi-functional (European) model of agriculture, bringing together market intervention with contract-based public service delivery, relying on small but specialised units with medium input and output necessitating cooperation in market access either collectively or with private partners; although being mostly associated with Europe, it exists also in other parts of the world albeit not with the level of public support as in the EU, where the Common Agriculture Policy (CAP) provides both Single Farm Payments based on hectares farmed and market intervention as well as rural development measures;
- **Community based systems**, often related to communal land and resources use, subsistence-farming and local marketing, high labour intensity and low capital, tradition-based cultivation methods, high resilience but low cost efficiency of these low input-output systems; these prevail in Africa and parts of Asia but do also exist in Europe and Latin America;

These systems co-exist in parallel in many locations, mainly defined by the underlying economic and political system. Inter-system exchanges and interdependences are stemming from international trade and environmental impacts, including climate change. These exchanges concern systems (e.g. community farming approaches in US and EU) as well as the integration of regional food systems due to the global drive for standardisation and certification, including quality and organic production.

An indicator-based assessment of the four key components based on the quantification of these indicators could use the following more detailed data sources:

- Economics: Capitalisation market and banks; Income stemming from market, shareholders, or only for subsistence
- Social: Sourcing and marketing only local, employment family labour, paid, self-employed
- Environment: Externalities both for environmental and health impacts
- Consumers choice and welfare, access and availability and acceptability of food stuffs
- Nutrition and prevention and health for animal plants and humans in prevention and eradication of diseases

In addition, some more indicators could be introduced:

- Innovation: Product innovation, Process innovation, Shared knowledge (open source)
- Trade and development: Interacted development policies, FTA in place, export promotion and subsidies

Table 3: Classification matrix – indicators of impact

	Key impacts	Indicator 1	2	3
Economic and social	Capital and employment	Income derived from market (contractual) – from direct marketing	Self-employed and paid labour	Agriculture/food share of total family/household income
Environment	Negative externalities	Impact on water, soil air	Biodiversity, animal welfare	Logistics and transport (GHG)
Consumers	Welfare and choice	Choice for final consumer	Affordability/access for final consumer	Information to consumer (labelling)
Nutrition and health	Disease and ill-health prevention	Animal and plant diseases outbreaks	Prevention of crises in food safety (liability)	Nutrition-related health impacts (obesity and NCD - CVD rates)

Source: Own compilation

II Mapping European Food policy

II.1 EU Food policies and rules

EU Food policy is defined by several distinct yet contextually linked areas of policy intervention under a specific policy heading and in the competence of one dedicated Commission department:

The extensive **regulatory framework** is within the remit of the European Commission's Directorate General for Health and Food Safety (DG SANTE). Legislation in the food sector is harmonized to up to 98% on European level. It is a cornerstone of the Single market (food industry is biggest manufacturing industry in Europa), ensuring that all food brought into circulation adheres to the same controlled safety standards based on a comprehensive system of controls and audits.

Food law is based on science drawing from European Food Safety Authority (EFSA) providing scientific opinions (risk assessment) as a basis for legislative actions (risk management) of the EU institutions. The underlying precautionary principles require a prior market authorisation for innovative products introduced in the Single market. Recent examples such as GMO demonstrate the complexity of this process. Even more so, as products already authorised can temporarily lose this status in case new scientific evidence comes up such as the case of certain Plant Protection Products (PPP), like Neonicotinoids (NNi).

A second policy area is the **Common Agriculture Policy (CAP)** whose main function is providing public funding to small part of society (6% total employment) with an even smaller contribution to the economy (4% of GDP), based on broad objectives set in the treaty. The main tool is the hectare-based Single Area Payment (80% of total CAP budget) the only condition for recipients is adherence to cross-compliance rules. These rules comprises several legislative acts, the majority of which stem from food safety and animal health and welfare while some reflect environment protection objectives.

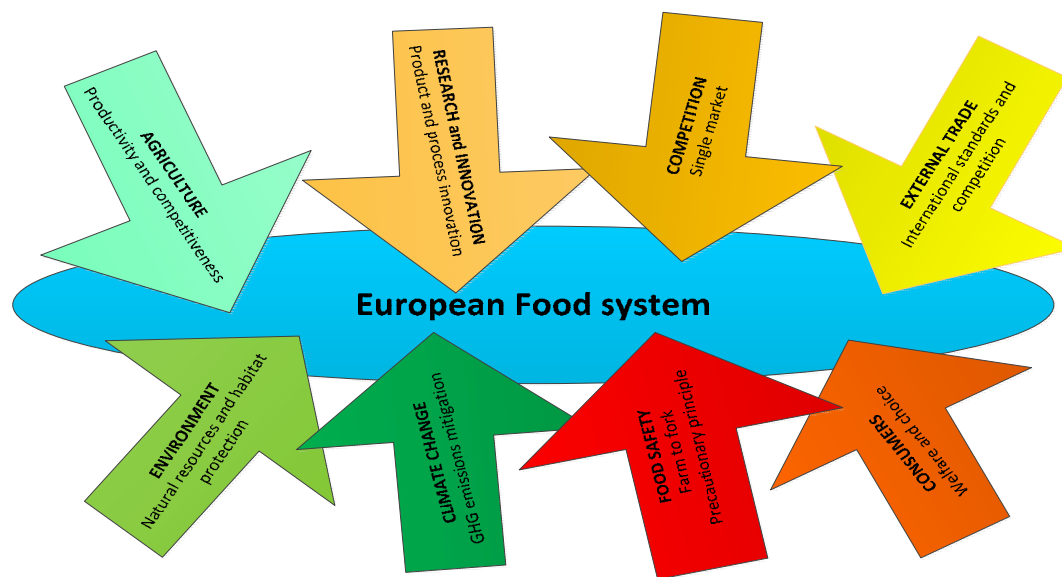
The second tool are **rural development programmes** (15% of total CAP budget) which aim at supporting farmers with on-farm investments, adapting organic agriculture and other elements of nature-friendly and sustainable farming and integrated development in rural areas, notably including service provision (rural tourism) and marketing (farmers marketing) but also public goods delivery (cultural landscape) thus allowing for a multifunctional family-farm based agriculture adapted to specific Member states. A third element is market policy and it's Single Market Organisations which also comprises measures to support cooperation and joint (marketing) activities of agriculture producers (Producers Organisations) thus strengthening the farmers market position.

A third element covers all issues related to **resource efficiency** in the wider sense. Key issue herein is sustainable use of natural resources comprising the mitigation of negative environment and climate change impacts. This notably concerns regulative acts such as the 'Nitrate directive' to protect water and soil from the results of intensive farming and especially animal husbandry. Other rules such as the habitat directive and the '*Natura 2000*' programme are aiming at the maintenance of biodiversity and ecosystems.

In the wider context, **international agreements** (WTO) and the EUs own bilateral economic partnership agreements establish the framework of exchange of goods and the provision of cooperation and aid while the '*codex alimentarius*', run sets standards for food stuffs. European food safety rules based on the precautionary principles are frequently challenged in this context.

Another key element are EU **competition rules** which shape EU food policy by ensuring the workings of the Single market notably in terms of marketing authorisation (eg food additives, special foods, and also food contact materials), and the prevention of the misuse of a market dominating position. This is particularly important with a view to the increasing powers of retailers and multi-national companies.

Table 4: EU policy interventions in the Food System



Source: Own compilation

Research and development grants agriculture and food a special role in the context of European context: A significant share of the new Horizon 2020 framework programme for research in Europe 2013-2020 is dedicated to agriculture. In addition, a specific European Innovation Partnership (EIP) initiative on agriculture and innovation has been created.

Private industry plays a role in the implementation of the food safety and marketing standards. International renowned tools such as Hazard-based critical control points (HACCP) and certification schemes such as GlobalGAP have contributed to establishing global supply chains. At the same time, the concentration of market power, notably retail has led to the proliferation of private standards, sometimes undercutting legal standards significantly thus undermining the legitimacy of the science-based official standards.

II.2 EU institutions and actors

When looking at the EU Food policy from an institutional perspective considering roles, competences and tools of the EU institutions in all aspects of Food policy, the underlying

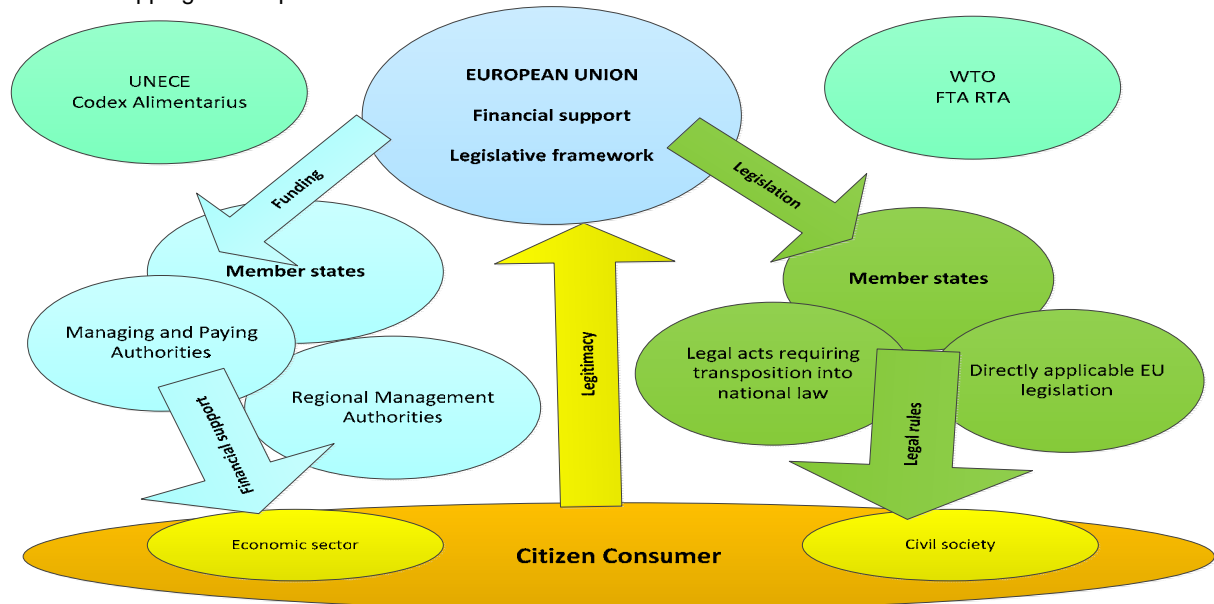
Food system must be taken into account. A classification of the institutions according to their role and function can be based on the criteria of multi-level Governance:

The current EU Food policy actively integrates multi-level Governance, bringing together local institutions with regional agencies, national governments and supra-national bodies as well as trans-national institutions. When looking at the various pillars of the current system, the following can be stated:

The most ambitious involvement of various Governance levels takes place both in the funding as well as the regulatory stream of Food policy. Notably the allocation, commitment and disbursement of rural development funds bring together all levels of Government with the European institutions and stakeholders. This concerns both the design (consultation) part of the process as well as the implementation (monitoring) part with notably the recipients and final beneficiaries. In the regulatory framework, notably in the area of legal acts that have to be transposed into national legislation, member states play a significant role in mitigating or increasing administrative burdens (gold plating).

These elements reflect the underlying Family-farming and SME driven Food system.

Table 5: Mapping of European institutional structure



Source: Authors compilation

In contradiction, the industrialised global systems relies much more on co-and self-regulation to allow for global supply chains: Multi-national companies in production, processing and trade active across the food chain with their link to global capital markets have the power to set their own standards, be it on food safety issues (PPP thresholds by retailers) or market standards (classification of fresh fruit & vegetables). The community based system on the other is due to its limited scope focusing on the regional and even more local level while a political system implies a centralised organisational structure and policy design and implementation.

III Building a European Food policy

III.1 Contradictions and inconsistencies

When considering the current EU institutional framework, given the nature of highly distinct policies focusing on specific sets of objectives a series of potential contradictions arises:

1. **Economics:** Main incentives is provided per hectare although almost 80% of EU farms have less than five hectares and thus, receive a minimum contribution, while few big landowners are receiving substantial amounts giving them a competitive advantage;
2. **Social:** Only a minor share of the CAP funds is allocated in return for the provision of public goods such cultural landscape, maintaining hill country or valuable areas in line with the principle of '*public funds for public goods*';
3. **Rural development:** The frequent lack of country-wide independent extension services and governance structures for public consultation of stakeholders is inconsistent with the principles of effective programming and implementation of rural development policies;
4. **Environment:** Compliance with rules as part of preconditions for accessing CAP funding (Single Area Payment) is controlled with a 1% requirement and thus inconsistent with the 5% control rate in rural development;
5. **Innovation:** Product innovation is favoured over process innovation and thus inconsistent with the aim of greening the CAP by fostering agro-ecology and using state-of-the art research for developing process management;
6. **Consumers choice:** Recent development of concentration of market shares by supermarkets and large retail chains are rising the risk for an inconsistency with competition policies by allowing for the potential abuse of dominant market position;
7. **Consumer welfare:** Provision of high value food notably in animal proteins (fresh and processed meats) at ever lower prices can create inconsistencies with health aims due to negative nutritional impact (Cardio-vascular diseases);
8. **Trade and development:** By assuring high safety levels of EU food products EU Food safety is part of the comparative advantage of European food products on the global market, often ensuring a price premium for European producers and traders and thus a key asset in international trade;

EU Food policy must reflect the underlying food systems; based on the societal values and norms of the EU. These define the objectives and in consequence the needs for policies and legislation.

III.2 Priorities and needs

The current Commissions '*Political guidelines*' introduce a new economic narrative, built around boosting investment, pursuing structural reforms and fiscal responsibility while contributing to better regulation and its effective implementation. Furthermore, any ex-ante or ex-post assessment require the ascertainment of a robust evidence-base, using up-to-date tools of economic analysis in compliance with the new approach, considering specifically the maturity and complexity of the existing legal framework and subsequently implying the need for modernisation and simplification.

For EU Food policy in its various pillars, this new Commission narrative translates into the recognition of the important contribution of the many **micro-SMEs**, which form the backbone of EU food sector by creating added-value in economic and societal terms and also, resilient employment.

At the same time, **innovation** as a key driver of growth must be understood to not only product (technological) but also process (organisational) innovation thus allowing for a participatory and sustainable approach with long term benefits for society.

Several diseases, including obesity and diabetes type II that are reaching epidemic proportions, are due to unsafe or poor quality food, with subsequent loss of productivity, quality of life and soaring associated direct and indirect health and social costs. The **role of prevention in food safety** and (public) health by reducing negative impacts and health costs due to policies ensuring access to healthy food and protection from harmful substances as well as initiatives fostering public health and a balanced diet are key for sustainable public finances and a healthy workforce.

Conclusions

The current EU Food policy is characterised by two distinct elements:

It is clearly based on a **Family-farming and SME-driven Food system**. However, the regulatory framework and policy interventions originate from a **series of distinct policy pillars**, each with its very own objectives, approach and tools that pose the risk of gaps and overlaps and in some case of obvious contradictions.

A comprehensive approach, reflecting all elements of the Food system and including a consistent set of objectives and respective adequate tools is therefore not yet in place.

However, both current challenges on the global level (TTIP negotiations) as well as a new narrative reflected in the Commissions *'Political guidelines'* offer a window of opportunity in the middle of the currently on-going EU financing period from 2013-2020 to launch a comprehensive policy evaluation to assess whether the regulatory framework is *'fit for purpose.'*

A so-called *'Fitness check'* of the Food chain, comprising all policy pillars across Commissions departments will *'aim to identify excessive regulatory burdens, overlaps, gaps, inconsistencies and/or obsolete measures as well as the cumulative impact of legislation.'*

On this basis, a comprehensive approach in line with the objectives, values and norms of the European citizens, producers and consumers for a truly European Food policy can be built.

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